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VIRGINIA BUSINESS REPORT

BUREAU OF BUSINESS RESEARCH, SCHOOL OF BUSINESS ADMINISTRATION
THE COLLEGE OF WILLIAM AND MARY, WILLIAMSBURG, VIRGINIA

Report No. 340 February, 1989

Business in Virginia January, 1989 Data

Weather had a strong positive influence on Virginia's economic performance in January (February will be a very different story!). Sunny, unseasonably warm days sent building permits soaring, up 46.8 percent statewide compared to January of 1988. Households got out of the house and shopped, too. Our sample of retail stores reported a 1.7 percent increase in January, almost equal to December's 1.9 percent gain. Extrapolating that evidence to all retail establishments indicates total retail sales rose strongly during January, probably a double-digit advance from the same month last year.

Virginia consumers' largesse generally did not extend to new cars, up only 0.1 percent. However, car buying varied widely around the state, ranging from a 48.5 percent increase in the Bristol, Virginia area to a 29.2 percent drop in Petersburg.

Bank debits at our sample of financial institutions gained only 2.4 percent statewide due to large decreases in Charlottesville and Norfolk. Spending rose quite strongly in most other areas, showing businesses as well as households spent quite freely in January.

The frequently balmy weather produced a few negatives, most notably a decrease in electricity consumption as heat pumps sat idle. Electricity usage fell 2.3 percent statewide from January 1988 levels, with most of our localities experiencing a decline.

The big news is not the January data, but what we now know about December 1988 retail spending in Virginia. Contrary to our expectations, Virginia households evidently bought at a record pace in the final days before Christmas. The Virginia Department of Taxation data on sales tax receipts show December retail sales totalled $5.0 billion. That is not only an astounding dollar total but also represents a 29.6 percent jump for December 1988 retail sales versus December 1987. A portion of the increase could be reporting anomalies since November sales showed a statewide decrease of 3.4 percent. However, shifting a portion of the sales gain to November still would leave close to a 20 percent gain for December. Any way you look at it, Virginia consumers spent very generously at year-end. The individual area data in the last column of Table II confirms nearly every area of the state experienced very high double-digit increases—and thirteen of our 17 areas reported sales growth of 20 percent or higher.

That last-minute surge turned 1988 from a so-so year to a fairly good one for many retailers. Our estimate, based on the preliminary data available, is Virginia's retail sales subject to the general sales tax reached $39.1 billion in 1988, up 6.6 percent from 1987.

Nationally, consumers did spend more freely in December than during most of the year. But, not nearly as freely as in Virginia. The December to December increase nationwide in total retail sales excluding the automobile group was 6.9 percent, only a fraction of the Virginia growth rate.

For all of 1988, the year-over-year rise in national retail sales excluding autos was 5.6 percent. Therefore Virginia's taxable retail sales growth exceeded the nation's gain, for a fairly comparable retail measure, by about a percentage point. Not as wide a margin as in some recent years, but still a plus for Virginia.RLP

Chart I

Nine Selected Business & Economic Indicators Percentage Change

Percentage Change January, 1989 from January, 1988

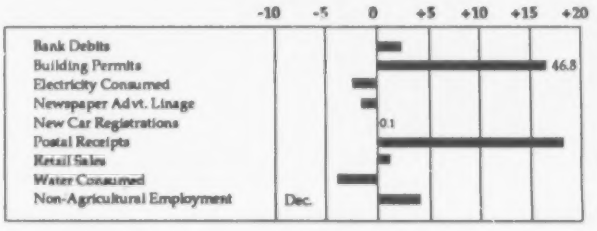
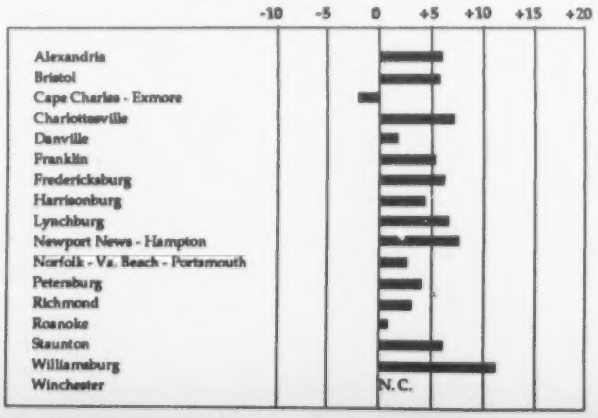


Chart II

City Indices

Percentage Change January, 1989 from January, 1988



Reducing Information Overload

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In Douglas Adam's popular science fiction trilogy, The Hitchhiker's Guide to the Galaxy, science has discovered the Ultimate Answer—42. Unfortunately, no one knows the question!

While the resultant intergalactic quest is entertaining for Adam's readers, searching for the "Ultimate Question" in reality can be the exact opposite—particularly in today's information-driven society, where personal computing has given users almost unlimited access to a wide variety of information (usually in the form of raw data).

Accumulating data/information, however, is a lot like eating peanuts—once you start, it is hard to stop. This propensity to collect TOO MUCH information can result in **information overload**, which roughly translates to "I know I've got the answer somewhere, but what's the question?"

Since one of the Bureau's primary functions is collecting and disseminating data/information, numerous requests are received from managers at all levels who are trying to cope with information overload. Their requests have a common thread—the desire to match the right question with the right (or most appropriate) answer.

With that in mind, here are some questions and answers (derived from Bureau requests) that might help reduce your information overload.

"What is the Consumer Price Index?"

Economic activity in the United States is generally measured in dollar figures and, as such, is sensitive to price changes. In order to track these changes, price indices have been developed by statisticians and economists, combining the prices of many items through a weighting system reflecting the relative importance of these items in a base period. Principal indices are the Producer Price Index (describing trends in wholesale price levels), the International Price Indices (both export and import), and the Consumer Price Index (CPI).

The CPI is defined by the U.S. Department of Labor as "a measure of the average change in the prices paid by urban consumers for a fixed market basket of consumption goods and services ... comparing what the market basket of goods and services costs this month with what the same market basket cost a month, a year, or even 10 years ago." The index also includes all taxes directly associated with the purchase and use of these market basket items.

The "market basket" is based upon quantities purchased by consumers in a base period, and expenditure items are classified into approximately seven major groups and 250 categories. The following simplistic example of this breakdown (by group and category respectively) was extracted from U.S. Department of Labor Report 734, "Revising the Consumer Price Index". [Please note that investment items such as stocks, bonds, and real estate are NOT included in this basket.]

- Food (cookies, cereals, cheese, coffee, chicken)
- Housing (residential rent, fuel oil, soaps and detergents, local telephone service)
- Apparel and its upkeep (men's shirts, women's dresses, jewelry)
- Transportation (airline fares, new and used cars, gasoline, car insurance)
- Medical care (prescription drugs, eye care, physicians' services, hospital rooms)
- Entertainment (newspapers, sports vehicles, toys, admissions, musical instruments)
- Other (haircuts, bank fees, college tuition)

Prices are collected on a monthly basis from about 4,000 food stores, 24,000 rental units, and 28,000 other stores and service establishments (department stores, hospitals, filling stations, etc.) in 85 urban areas across the country.

In 1987 the CPI base year was changed from 1967 = 100 to 1982 = 100. Additionally, its entire structure was revised to more accurately reflect technological advances and changes in consumer buying habits. Rather than trying to convert from these old values using a formula, it is suggested that people use the new CPI values shown at Table III. CPI monthly figures can be obtained from various sources, including (but not limited to) the U.S. Department of Labor Monthly Labor Review, The Wall Street Journal, economic bulletin boards, and both public and college libraries.

"Is the Consumer Price Index a Cost-of-Living Index?"

When people talk about a cost-of-living index they are generally referring to a percentage change in prices over a period of time. However, a true cost-of-living index would also reflect the **substitutions** consumers would be willing to make in their buying or consumption habits when faced with relative price changes. [If the price of beef rose, consumers would be willing to substitute pork, poultry or fish in order to maintain (or often improve) their satisfaction levels.] As such, there is no true cost-of-living index.

Since the Consumer Price Index does measure price changes, it has been called and used as a cost-of-living index. However, the CPI is based on a market basket of **fixed** items in **fixed** proportions over a period of time and does not reflect consumer substitutions (nor does it take into account income and Social Security taxes since they are not associated with the prices of specific goods and services). For example, an increase of 10% in the CPI shows the cost of buying a base-period basket of goods and services has risen 10%. Thus, it costs more to buy the **same** quantities of the **same** goods. If that maintains consumer satisfaction levels, it can be said that the cost of meeting consumption needs has risen by 10%.

If a change in the CPI is viewed over a short period of time during which buying patterns will not change much, it would be appropriate to say the cost of living has risen

by about the percentage of the CPI change. However, over a longer period of time (such as several years) the CPI should be viewed as less indicative of the consumer's cost of living and more an upper limit of change.

"How can I figure an increase in the CPI between any two months?"

One of the easiest methods to determine increases or decreases between periods of time is to subtract the earlier period from the later period, divide that amount by the index for the earlier month, and then multiply by 100 to get the percent. For example, given December 1987 = 110.5 and December 1988 = 115.4, a 4.4% increase was determined using:

$$115.4 - 110.5 = 4.9$$
$$4.9/110.5 = .044 \times 100 = 4.4\%$$

Searching for the right answer can be a full-time job, especially since there is no "Ultimate Answer" to solve the multitude of problems faced by businesses today. However, by taking the time to research, develop, and ask the right question(s), managers can learn to avoid the pitfall of information overload, creating instead the "Ultimate Information".

SELECTED BUSINESS AND ECONOMIC INDICATORS FOR 17 CITIES

TABLE I January, 1989 — Monthly Index Number Comparisons of Current Month to Same Month in Base Period (1977) - Base Period = 100

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	DECEMBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	POSTAL RECEIPTS
The State		401.9	184.5	186.2	54.3	136.4	149.9	87.6	130.3	445.8
Alexandria	146.3	572.3	573.2	218.6	N.A.	115.3	207.0	102.2	127.0	N.A.
Bristol	133.4	N.A.	99.5	140.6	54.2	102.1	120.1	98.7	117.4	334.6
Cape Charles - Exmore	135.1	N.A.	525.7	157.6	N.A.	82.9	N.A.	N.A.	112.9	231.2
Charlottesville	188.8	55.5	396.5	170.5	N.A.	110.2	117.5	129.6	188.6	417.0
Danville	140.1	N.A.	75.6	116.0	86.0	93.7	104.7	76.3	N.A.	364.1
Franklin	139.6	N.A.	64.9	156.3	114.7	118.0	N.A.	89.0	101.3	335.0
Fredericksburg	152.5	253.9	187.9	N.A.	140.3	171.7	N.A.	88.4	171.6	N.A.
Harrisonburg	153.5	324.1	1264.9	N.A.	97.4	81.2	N.A.	142.8	137.0	342.1
Lynchburg	317.0	473.0	139.0	158.7	N.A.	89.9	101.0	109.1	176.8	1546.7
Newport News - Hampton	149.4	N.A.	267.2	150.8	N.A.	83.8	144.5	104.8	187.3	N.A.
Norfolk - Va. Beach - Portsmouth	164.8	511.4	198.5	198.2		94.1		79.3	212.4	N.A.
Petersburg	146.5	108.1	205.5	N.A.	N.A.	57.7	137.9	115.9	144.3	280.9
Richmond	148.3	411.9	203.9	205.4	101.5	96.3		103.4	108.6	364.3
Roanoke	139.2	435.1	131.2	136.3	119.0	60.2	126.3	104.9	91.5	431.7
Staunton	113.0	168.5	120.8	N.A.	75.3	76.8	N.A.	N.A.	137.7	N.A.
Williamsburg	180.4	202.6	242.3	208.2	N.A.	146.6	N.A.	82.0	95.8	358.1
Winchester	N.C.	413.7	108.2	150.0	186.4	124.3	N.A.	N.A.	N.A.	N.A.

TABLE II January, 1989 — Percentage Change from Same Month Last Year.

CITY	CITY INDEX*	BANK DEBITS	BUILDING PERMITS	ELECTRICITY CONSUMED	NEWS-PAPER ADV. LINAGE	NEW CAR REGIS-TRATIONS	DECEMBER NON-AGRI-CULTURAL EMPLOYMENT #	WATER CONSUMED	SAMPLE RETAIL SALES †	DECEMBER TOTAL RETAIL SALES ‡
The State		2.4	46.8	-2.3	-1.6	0.1	4.0	-4.0	1.7	29.6
Alexandria	6.3	20.7	22.1	-1.8	N.A.	0.4	5.7	19.7	-2.9	34.9
Bristol	5.6	N.A.	16.4	2.5	1.3	48.5	4.1	-15.7	-1.2	15.3
Cape Charles - Exmore	-2.2	N.A.	75.3	0.0	N.A.	21.4	N.A.	-26.4	-7.3	11.4
Charlottesville	6.9	-18.8	41.8	-3.1	N.A.	3.7	1.8	13.0	5.3	24.2
Danville	2.1	N.A.	41.2	-3.0	-8.3	10.3	2.7	-11.7	N.A.	22.5
Franklin	5.1	N.A.	-71.8	-8.9	4.0	28.8	N.A.	-1.0	-0.9	20.5
Fredericksburg	6.0	24.8	34.4	N.A.	7.0	4.4	N.A.	14.8	-3.1	25.2
Harrisonburg	4.3	30.0	365.6	N.A.	-4.5	-10.1	N.A.	3.3	5.0	26.3
Lynchburg	6.3	14.0	108.3	5.9	N.A.	-12.4	1.3	18.7	0.6	35.4
Newport News - Hampton	6.8	N.A.	-13.7	-3.4	N.A.	8.2	0.9	-7.2	10.0	27.9
Norfolk - Va. Beach - Portsmouth	2.6	-1.1	50.6	-6.3		4.8		-10.2	1.9	25.5
Petersburg	3.9	-44.7	-55.4	N.A.	N.A.	-29.2	1.9	-17.7	7.4	50.1
Richmond	3.0	-0.8	61.8	-2.6	0.9	-14.8		-2.0	2.7	35.3
Roanoke	0.9	21.5	229.9	2.6	-6.9	0.0	0.3	-4.4	-0.6	18.2
Staunton	6.1	21.2	268.4	N.A.	2.8	-5.0	N.A.	N.A.	13.6	-2.2
Williamsburg	11.9	33.1	2328.5	-2.5	N.A.	23.8	N.A.	0.6	8.2	36.8
Winchester	N.C.	17.8	321.0	-0.3	3.6	3.0	N.A.	N.A.	N.A.	40.9

* Computation of City Index is based upon a weighted arithmetic mean of all business and economic components listed except Building Permits and Bank Debits, which are excluded because of their highly erratic nature.
# Virginia Employment Commission data which lags behind current reports.
† Preliminary data based on a survey sample.
‡ Total sales based on sales tax information which lags behind current reports.
⊐ Only total MSA data are available for these areas.

N.A. – Not Available
0.0. – No Change
N.C.—Not Comparable

TABLE III

Consumer Price Index

Year	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Average	Percent Change Dec.-Dec.
1979	68.3	69.1	69.8	70.6	71.5	72.3	73.1	73.8	74.6	75.2	75.9	76.7	72.6	13.3%
1980	77.8	78.9	80.1	81.0	81.8	82.7	82.7	83.3	84.0	84.8	85.5	86.3	82.4	12.5%
1981	87.0	87.9	88.5	89.1	89.8	90.6	91.6	92.3	93.2	93.4	93.7	94.0	90.9	8.9%
1982	94.3	94.6	94.5	94.9	96.8	97.0	97.3	97.7	97.9	98.2	98.0	97.8	96.5	3.8%
1983	97.8	97.9	97.9	98.6	99.2	99.5	99.9	100.2	100.7	101.0	101.2	101.3	99.6	3.8%
1984	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3	103.9	3.9%
1985	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3	107.6	3.8%
1986	109.6	109.3	109.5	109.8	109.6	109.5	109.5	109.7	110.2	110.3	110.4	110.5	109.6	1.1%
1987	111.2	111.8	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4	113.6	4.4%
1988	115.7	116.0	116.5	117.1	117.5	118.0	118.5	119.0	119.8	120.2	120.3	120.5	118.3	4.4%

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